

Out and about

- ◆ Choose a three-digit car number, e.g. 569.
- ◆ Make a subtraction from this, e.g. $56 - 9$.
- ◆ Work it out in your head. Say the answer.
- ◆ If you are right, score a point.
- ◆ The first to get 10 points wins.

Mugs

You need a 1 litre measuring jug and a selection of different mugs, cups or beakers.

- ◆ Ask your child to fill a mug with water.
- ◆ Pour the water carefully into the jug.
- ◆ Read the measurement to the nearest 10 millilitres.
- ◆ Write the measurement on a piece of paper.
- ◆ Do this for each mug or cup.
- ◆ Now ask your child to write all the measurements in order.

Counting

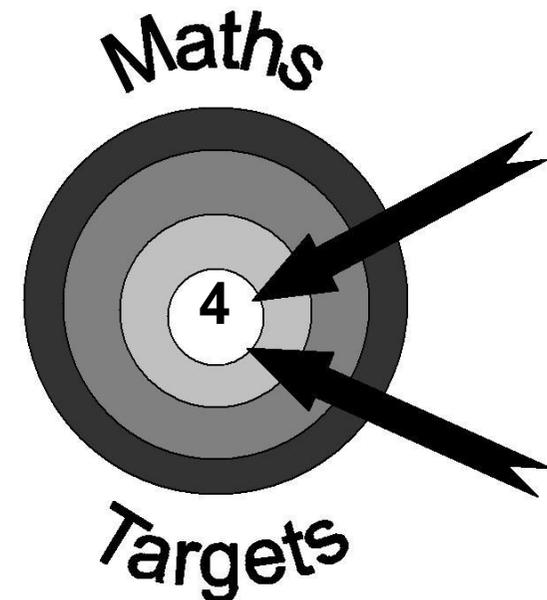
Time your child while he / she does one or more of these.

- ◆ Count in sixes to 60.
 - ◆ Count back in sixes from 60 to zero.
 - ◆ Start with 4. Count on in sixes to 70.
 - ◆ Start with 69. Count back in sixes to 3.
- Try counting in different steps such as 25s or 9 or 0.1

Battleships

Have a game of battleships using coordinates.

Year 4



A booklet for parents

Help your child with mathematics

BATHWICK ST. MARY SCHOOL

Targets – Year 4

By the end of Year 4, most children should be able to...

- ❖ Count on in multiples of 6,7,9,25 and 100
- ❖ Find 10,100 or 1000 more or less than a given number
- ❖ Recognise 1000s ,100s, 10s and 1s in a 3 digit number
- ❖ Round any number to the nearest 10, 100 or 1000
- ❖ Read Roman numerals to 100
- ❖ Add and subtract numbers to 4 digits using efficient written methods
- ❖ Estimate and use inverse operations
- ❖ Recall and use all times tables to 12x12
- ❖ Multiply 3 numbers together
- ❖ Count in tenths and hundredths
- ❖ Recognise , find and write fractions of objects and numbers

Activities to do at home

Tables

Practise your times tables. Say them forwards and backwards.

Ask your child questions like:

What are five threes? What is 15 divided by 5?

Seven times three? How many threes in 21?

Measuring

Use a tape measure that shows centimetres.

◆ Take turns measuring lengths of different objects, e.g. the length of a sofa, the width of a table, the length of the bath, the height of a door.

◆ Record the measurement in centimetres, or metres and millimetres. Try converting them from one to the other. if it is more than a metre, e.g. if the bath is 165 cm long, you could say it is 1m 65cm (or 1.65m).

◆ Write all the measurements in order.

Number game

◆ Put some dominoes face down.

◆ Shuffle them.

◆ Each choose a domino.

◆ Multiply the two numbers on your domino.

◆ Whoever has the biggest answer keeps the two dominoes.

◆ The winner is the person with the most dominoes when they have all been used.

Looking around

Choose a room at home.

Challenge your child to spot

20 right angles or acute angles or obtuse angles in it.

Find 20 parallel or perpendicular lines

Find symmetrical objects. How many have 2 or more lines of symmetry?

Questions you could ask your child as they are doing their Mathematics.

- What is the same or different about these numbers, sums, processes?
 - How could you organise your learning?
 - Can you show me an example?
 - What are the connections between...?
 - What do you notice?
 - When is it not true?
 - Can you find another example?
 - Can you find an example that does not work?
 - How can you be sure?
 - What question can you ask next?
 - Can you explain why that happens?
 - Can you describe...?
 - Can you do this mentally?
- ❖ Add, subtract and compare fractions with the same denominator
 - ❖ Compare and order decimals
 - ❖ Know decimal equivalents of tenths and hundredths
 - ❖ Identify lines of symmetry in 2-d shapes
 - ❖ Use coordinates in the first quadrant
 - ❖ Identify acute and obtuse angles and order by size
 - ❖ Use bar charts and line graphs to represent data
 - ❖ Convert between units of measure e.g. km to m, hour to minute.
 - ❖ Find the area and perimeter of rectangles
 - ❖ Read, write and convert time between analogue, digital 12hour and 24hour clocks.

These are examples of some of the mathematical targets your child is working towards this year.

STRATEGIES

ADDITION

1) Add 3 digit numbers by partitioning.

$$\begin{array}{l} \text{e.g. } 242+533 = \\ 200+500 = 700 \\ 40+30 = 70 \\ 2+3 = 5 \end{array} \left. \vphantom{\begin{array}{l} 200+500 = 700 \\ 40+30 = 70 \\ 2+3 = 5 \end{array}} \right\} = 775$$

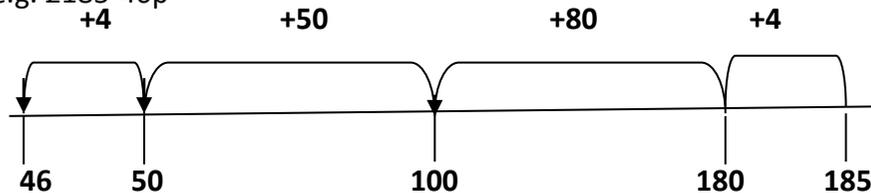
2) column addition

$$\begin{array}{r} 83 \\ + 42 \\ \hline 120 \\ \underline{5} \\ 125 \end{array} \qquad \begin{array}{r} 546 \\ + 259 \\ \hline 805 \\ \underline{11} \\ 11 \end{array} \qquad \begin{array}{r} 4321 \\ + 3959 \\ \hline 8280 \\ \underline{11} \\ 11 \end{array}$$

SUBTRACTION

1) Use of a number line to count on.

e.g. £185-46p



$$80p+50p+5p+4p = 139p = \text{£}1.39$$

2) partitioning

$$\begin{array}{l} \text{e.g. } 834-378 = \\ 834-300 = 534 \\ 534-70 = 464 \\ 464-8 = 456 \end{array}$$

3) column subtraction

$$\begin{array}{r} 49 \\ - 17 \\ \hline 32 \end{array} \qquad \begin{array}{r} 112 \\ - 31 \\ \hline 81 \end{array} \qquad \begin{array}{r} 157 \\ - 81 \\ \hline 76 \end{array}$$

MULTIPLICATION

1) partitioning

$$\text{e.g. } 2 \times 49 = (2 \times 40) + (2 \times 9) = 80 + 18 = 98$$

2) grid method

x	40	9
2	80	18

$$80+18=98$$

3) column multiplication methods

$$\begin{array}{r} 49 \\ \times 2 \\ \hline 18 \\ \underline{80} \\ 98 \end{array} \qquad \begin{array}{r} 49 \\ \times 2 \\ \hline 98 \\ \underline{1} \\ 1 \end{array} \qquad \begin{array}{r} 345 \\ \times 5 \\ \hline 1725 \\ \underline{22} \\ 22 \end{array}$$

DIVISION

E.G. 150 ÷ 3

1) repeated subtraction using groups of 3.

$$150-30 = 120 \quad 120-30 = 90 \quad 90-30 = 60 \quad 60-30 = 30 \quad 30-30 = 0 \longrightarrow 50 \text{ lots of } 3 \text{ subtracted so } 150 \div 3 = 50$$

2) chunking

E.g. $184 \div 7$

$$\begin{array}{r} 184 \\ - 140 \text{ (20 groups of 7)} \\ \hline 44 \\ - 42 \text{ (6 groups of 7)} \\ \hline 2 \end{array}$$

} 26 groups altogether
} $184 \div 7 = 26 \text{ r } 2$

3) short division

$$\text{e.g. } \begin{array}{r} 26 \\ 7 \overline{) 182} \end{array}$$